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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/840,136	05/06/2004	Antonio Cardoso	CRUZ/002	7257

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EXAMINER
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CHUKWURAH, NATHANIEL C

ART UNIT	PAPER NUMBER
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3721

DATE MAILED: 01/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/840,136	<b>Applicant(s)</b> CARDOSO, ANTONIO	
	<b>Examiner</b> Nathaniel C. Chukwurah	<b>Art Unit</b> 3721	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 December 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 and 23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 and 23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 5/6/04; 9/26/05 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6, 8-13, 15 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over McDowell et al. (US 5,375,664) in view of Roynestad (US 6,047,771).

With regard to claim 1, McDowell et al. discloses an attachment comprising: a lead (30), a hammer (38) slidably coupled to the lead; a lead mounting assembly (20, 26, 36) pivotally coupled to the lead, and having a mounting arrangement as shown with hydraulic actuator (34) configured to allow rotation of the lead in a plane; a hydraulic actuator (36) coupled to the lead (30) and the lead mounting assembly (20, 26, 36).

McDowell et al. discloses all claimed subject matter but lacks specific teaching of the actuator (36) ~~is~~ adapted to control the orientation of the lead relative to the lead mounting assembly in a second plane that is different than the first plane.

However, Roynestad teaches actuator (23) which turns the derrick together with drilling machine (24) in relation to the lead mounting assembly (16' attachment frame) to do work.

Therefore, it would have been obvious to one skilled in the art at the time of the invention to modify the lead mounting assembly of McDowell et al. by providing the actuator to orient the lead relative to the lead mounting assembly in a second plan as taught by Roynestad in order to position the lead in different plane to do work.

Art Unit: 3721

With regard to claim 2, McDowell et al. shows a winch (46) coupled to the lead mounting assembly.

With regard to claim 3, McDowell et al. shows a first mounting hole (see hole at 31) substantially perpendicular to the lead (30).

With regard to claim 4, McDowell et al. shows the center line of the hole (see hole at 31) perpendicular to an axis of rotation of the lead (30) relative to the lead mounting assembly.

With regard to claim 5, McDowell et al. shows a mounting bracket (26) having a first hole (28) for coupling to a boom (20) and a second mounting hole (see hole adjacent 28) for coupling hydraulic actuator (34) adapted to rotate the mounting bracket (26) relative to the boom and an axis of rotation defined by the first hole.

With regard to claim 6, McDowell et al. shows a mounting plate (portion extending midway of 26) mounting bracket (26), and a shaft (see shaft coupling 31 and 26), the shaft is coaxial with an axis of rotation of the lead relative to the mounting plate.

With regard to claim 8, McDowell et al. shows a cage (hammer housing) shielding the hammer and adapted to travel with the hammer.

With regard to claim 9, the attachment of McDowell et al. meets all of applicant claimed subject matter but lacks the specific teaching of the cage comprising an integral ladder. However such feature is an engineering design choice which would have been obvious to one of ordinary skill in the art as a matter of engineering design choice to include a ladder to the cage since applicant has not disclosed that having an integral ladder solves any stated problem and it appears that the hammer would perform equally well without the integral ladder.

Art Unit: 3721

With regard to claim 10, McDowell et al. discloses a lead (30), a hammer (38) slidably coupled to the lead, a lead mounting assembly (20, 26, 36) coupling the lead to the boom (20), a boom mounting hole (see hole adjacent 28) defining a first axis of rotation substantially perpendicular to the lead (30); the lead (30) also rotates at (31).

McDowell et al. discloses all claimed subject matter but lack specific teaching of the lead being relational relative to the lead mounting assembly about a second axis of rotation substantially perpendicular to the first axis of rotation.

However, Roynestad teaches a lead (16) which is rotational by the actuator (23, 23') relative to the lead mounting assembly (16' attachment frame) in a second axis of rotation substantially perpendicular the first axis of rotation to do work.

Therefore, it would have been obvious to one skilled in the art at the time of the invention to provide the lead mounting assembly of McDowell et al. with such rotation about a second axis substantially perpendicular to the first axis of rotation as taught by Roynestad in order to have the advantage of moving the lead in different positions to do work.

With regard to claim 11, McDowell et al. shows a hydraulic actuator (36) coupled to the lead (30) and the lead mounting assembly (20, 26, 36), the actuator causes the lead to rotate relative the mounting assembly. Further, the actuator is capable of being coupled the existing hydraulic fluid control port of the excavator.

With regard to claim 12, McDowell et al. shows a winch coupled to boom (20).

With regard to claim 13, McDowell et al. shows a mounting bracket (26) having a boom mounting hole (see hole at 28); a mounting plate (portion extending midway of 26) coupled to

Art Unit: 3721

the mounting bracket (26), and a shaft (see shaft coupling 31 and 26), the shaft is coaxial with an axis of rotation of the lead relative to the mounting plate.

With regard to claim 15, McDowell et al. shows a cage (hammer housing) shielding the hammer and adapted to travel with the hammer.

With regard to claim 23, McDowell et al. discloses an attachment comprising: a lead (30), a hammer (38) slidably coupled to the lead, a lead mounting assembly (20, 26, 36) coupling the lead to the boom (20), and configured to allow positioning of the lead (30) in to planes relative to the boom (20).

Claims 7 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over McDowell et al. in view of Roynestad as applied to claims 1 and 10 and further in view of Doty (US 4,333,541).

With regard to claims 7 and 14, the modified lead mounting assembly of McDowell et al. discloses all claimed subject matter but lack specific teaching of plurality of holes formed in the lead and adapted to accept a pin for limiting the travel of the hammer.

However, Doty teaches holes (29) for engaging pins (33) in order to limit adjustability to the overall positioning of the channel relative to the side plate.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the attachment of modified lead mounting assembly of McDowell et al. with holes as taught by Doty in order to give limiting adjustability to the overall positioning of the channel relative to the side plate. See (col. 3, lines 2-3).

Art Unit: 3721

***Response to Arguments***

Applicant's arguments with respect to claims 1-15 and 23 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathaniel C. Chukwurah whose telephone number is (571) 272-4457. The examiner can normally be reached on M-F 6:00AM-2:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi Rada can be reached on (571) 272-4467. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NC

December 27, 2005.

  
JOHN SIPOS  
PRIMARY EXAMINER